

With Complaints



1907.

Borough of Bedford.

ANNUAL REPORTS
OF THE
MEDICAL OFFICER OF HEALTH
AND OF THE
SANITARY INSPECTOR.

**Public Health Department,
Sanitary Inspector's Office,
Town Hall,**

JANUARY, 1908.

To the Chairman and Members of the Public Health Committee.

GENTLEMEN,

As Sanitary Inspector to your Authority, I have the honor to present for your information, the Annual Report upon the work done in this department during the year ending December 31st, 1907.

SUMMARY.

No. of house drains tested by request	168
No. where defects were found	88
No. of School and Boarding House drains tested.....	26
No. where defects were found	12
No. of notifications of Infectious diseases	123
No. of cases removed to Isolation Hospital	78
No. of deaths in Hospital (Diphtheria 3, Scarlet Fever 2)	5
No. of house drains tested after notification of Infectious Disease	83
No. where defects were found	13
No. of rooms disinfected	126
No. of articles put through steam Disinfector	164
House to house inspection and drain tests	600
No. of defects found in drains and sanitary fittings	228
No. requiring internal cleansing	155
No. found overcrowded	5
No. found unfit for human habitation	8
No. of other nuisances discovered	154
No. of re-tests after drain repairs	423
No. of visits of inspection, re abatement of nuisances, drain repairs, etc.	512
No. of house yards requiring paving, under Bye-laws	45
No. of visits to Factories, Workshops, and Outworkers	391
No. of notices served re same	43
No. of visits to common lodging houses.....	90
No. of visits to slaughter houses	2102
No. of visits to Cowsheds and Dairies	124
No. of samples taken under Food and Drugs Act	123
No. found adulterated	5
No. of samples of Town Water sent for analysis	24
No. of samples taken from private wells	5
No. of preliminary notices to abate served	380
No. of verbal notices to abate given	40
No. of statutory notices to abate served	40
No. of legal proceedings taken for abatement of nuisances.....	0

A large amount of Sanitary work has been accomplished, and I am pleased to report that little difficulty has been experienced in getting the necessary work done, in a satisfactory manner.

The drains tested by request numbered 194, the Fees received for same, amounting to £97, have been paid to the District Fund.

Defects of a more or less serious nature were discovered at 100. These defects were found to arise from defective clay pipe joints, or from cracked or broken pipes, caused by the settlement of the ground. Those at which no defects were found, had in all cases been tested at previous times, or had been lately laid under modern conditions. All the defective drains were made sound, without further trouble, on the report being sent to the owner of the property. I am again pleased to note that the importance of sound plumbing is now almost universally recognized by property owners, as being the most economical procedure, in the long run.

At the request of the Governors of the Harpur Trust, I have tested and reported upon the sanitary arrangements of the Girls' High and Modern Schools, and upon all the Boarding Houses in connection with the Schools, and the recommendations made in such reports have been, in the majority of cases, promptly carried out.

The above also applies to the Kindergarten and Mrs. Carroll's Schools. These are inspected at the end of each term.

INFECTIOUS DISEASES.

During the year 1907, 123 notifications of Infectious disease have been received by the Medical Officer of Health, as follows:—

	No. of Cases.	No. of Houses Infected.	Removed to Hospital.		Died in Hospital.	
			S.F.	Diph.	S.F.	Diph.
Scarlet Fever	72	58	50		2	
Diphtheria	39	29		28		3
Enteric Fever	4	3				
Erysipelas	8	7				
Total	123	97	50	28	2	3

All the houses were visited, and the circumstances surrounding the cases entered in the Register for the information of the Medical Officer of Health.

The drains of 83 of the infected houses were tested, and defects were found at 13.

DISINFECTION.

In all cases of Infectious disease, disinfection is done entirely free of cost to the occupier of the house.

126 rooms were disinfected, by means of Formic Aldehyde, gas being generated by vapourizing Formalin tabloids, or by vapourizing 40 per cent. Formalin in the presence of steam.

In 16 instances the disinfection of rooms, bedding, etc., was offered and accepted after deaths from Phthisis.

164 articles were removed from infected houses and put through the steam disinfecter. By means of this apparatus, absolute disinfection can be obtained the articles are removed from the house in a zinc-lined van, and returned in another similar van, used solely for disinfected articles. Thus, the risk of returning infected articles to the house is reduced to a minimum.

Analysis of the expenditure, etc., incurred at the Borough Isolation Hospital during the year 1907.

No. of patients, 78, viz.: Diphtheria, 28; Scarlet Fever, 50.

	£	s.	d.	£	s.	d.
Medical Fees, attending patients	90	0	0			
Extra Nurses' Fees	51	3	0			
	<hr/>			141	3	0
Provisions—						
Milk	43	11	5			
Meat	44	11	5			
Groceries	92	2	6			
Bread, Flour, etc.	17	10	7			
Fish	22	6	2			
Vegetables	15	0	10			
	<hr/>			235	2	9
Painting Hospitals	59	10	0			
Oil, Coal, Coke, Wood, etc.	62	13	11			
New Furniture, Repairs, etc.	22	14	1			
Medicinal Sundries, Anti-toxin, etc.	15	3	3			
Horse Hire, Ambulance	10	1	0			
Disinfectants, Soap, etc.	3	11	6			
	<hr/>			173	13	9
Salary of Matron	50	0	0			
Salary of Staff Nurse	30	0	0			
Salary of Caretaker and Wife	52	0	0			
Salary of Laundrymaid and extra help	24	17	0			
	<hr/>			156	17	0
				<hr/>		
				£706	16	6
Received from Patients				48	0	0
				<hr/>		
Total Cost				£658	16	6
				<hr/>		

EXPENDITURE.

	£	s.	d.
1902. 112 patients	963	12	10
1903. 110 „	1001	15	10
1904. 57 „	448	10	7
1905. 133 „	759	7	6
1906. 272 „	1414	18	8
1907. 78 „	658	16	6

NUISANCES.

The 450 nuisances discovered or reported at the Office (including those found at house-to-house inspection) were of a very varied nature. 54 were of such a character as to require no structural alteration to property to procure abatement, and verbal intimation to the persons responsible was sufficient for the abatement of the various nuisances.

25 complaints were received at the Office in respect to bad smells from the street sewers, and for the non-removal of house refuse. These were communicated to the Borough Surveyor, who had the same attended to.

The following table shows the number of notices sent out to procure the abatement of the various nuisances:—

Preliminary Notices.

Various Nuisances.	Internal Cleansing.	Overcrowding.	House unfit for Habitation.
228	155	5	8

Statutory Notices.

22	10	0	8
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In no case was it necessary to resort to Police Court proceedings to procure compliance with the notices.

HOUSE TO HOUSE INSPECTION AND DRAIN TESTING.

600 houses were inspected, and the smoke test applied to the drains of the majority of the houses, with the result that defects were found in the drains or sanitary fitments of 228, mainly comprising blocked drains, defective joints, or broken pipes. w.c.'s without water supply, or pans blocked, defective ventilating shafts, and other nuisances arising from accumulation of garbage, filthy fowl houses, and heaps of manure, etc.

INTERNAL CLEANSING.

I have called the attention of the Medical Officer of Health to 155 houses that required more or less internal cleansing, and on his certificate under Sec. 46 Public Health Act, have served the usual notices to Cleanse, which have been complied with.

OVERCROWDING.

5 cases of excessive overcrowding were discovered, and the nuisance abated on my sending a notice to do so to the occupier of the house. I may again state that it is a matter of the greatest difficulty to detect overcrowding, as in the first place it is in the interest of all parties concerned, to maintain the greatest secrecy as to the existence of the evil, and information obtained from the chief occupier of the house, is (where it does exist) a long way from the truth, and this, coupled with the fact that the nuisance does not necessarily exist at the time an inspection is made, renders it very difficult of detection, and even where it is suspected to exist, it is quite another matter to establish the fact.

HOUSES UNFIT FOR HABITATION.

The Medical Officer of Health has certified that 8 houses which he had inspected, were, in the state they were then in, unfit for human habitation. These houses, after the statutory notices had been served, were put into a proper state of repair and cleanliness.

PAVING OF YARDS AND OPEN SPACES.

In my last Yearly Report, attention was called to the necessity of the Authority making Bye-Laws under Sect. 25 of the Public Health Act, for the prevention or remedy of insanitary conditions of yards and open spaces in connection with dwelling houses.

I am glad to say that Bye-Laws dealing with this matter have now been made, and were, on July 10th, 1907, sanctioned by the Local Government Board. Since they came into force, notices have been served on the owners of 45 houses, calling on them to comply with the requirements of these Bye-Laws, with the result that the yards, etc., so paved are in a greatly enhanced sanitary condition.

STATUTE FAIRS.

The dwelling vans of the Showmen who visit the Town for the purpose of attending these Fairs, have, as in former years, been inspected, in order to ascertain their sanitary condition, and also for the purpose of detecting any infectious disease among the inmates.

The condition of all the vans was very satisfactory, and no case of sickness was found among the occupiers.

COMMON LODGING HOUSES.

The Common Lodging Houses on the Register number 5, with 74 beds. Numerous visits of inspection have been made, at all hours, by myself and in company with the Medical Officer of Health, and I am glad to be able to say that they have been well conducted, and in no instance was a breach of the Bye-Laws discovered. No doubt the prosecution and conviction of two keepers of Common Lodging Houses, in the previous year, for breaches of the Bye-Laws has had a good deal to do with this satisfactory condition of the houses.

During the year the "Royal Oak" has twice changed tenants, viz., in January and June; and in May, the keeper of the "Live and Let Live," applied for the registration of another room with 4 beds. This was granted by the Town Council.

The following are the names of the houses, the number of beds in each house, and the number of persons who stayed in the house:—

	THE BOOT.			THE COCK.			THE LIVE & LET LIVE			THE WHITE HART			THE ROYAL OAK			TOTALS FOR		
	One room. Nine beds.			Four rooms. 22 beds.			Four rooms. 26 beds.			Two rooms. 7 beds.			Two rooms. 10 beds.			FIVE HOUSES, 74 beds		
	Males.	Females	Total.	Males.	Females	Total.	Males.	Females	Total.	Males.	Females	Total.	Males.	Females	Total.	Males.	Females	Total.
1907.																		
1st Qr.	469	0	469	753	58	811	794	0	794	540	0	540	288	3	291	2844	61	2905
2nd Qr.	394	0	394	734	5	739	987	0	987	463	0	463	385	0	385	2963	5	2968
3rd Qr.	405	0	405	942	6	958	1026	0	1026	269	0	269	303	0	303	2955	6	2961
4th Qr.	490	0	390	1251	2	1253	1052	0	1052	473	0	473	519	0	519	3685	2	3687
Totals	1658	0	1658	3690	71	3761	3859	0	3859	1745	0	1745	1495	3	1498	12447	74	12521
Average 4'54 per night				10'3 per night.			10'57 per night.			4'3 per night.			4'1 per night.			34'3 per night.		

1903	..	9917	Males	..	1567	Females	..	Total
1904	..	12041	"	..	866	"	..	"
1905	..	14828	"	..	636	"	..	"
1906	..	12877	"	..	144	"	..	"
1207	..	12447	"	..	74	"	..	"

DAIRIES, COWSHEDS, AND MILKSHOPS.

During the past year 6 applications for registration as Purveyors of Milk were received and granted.

At the end of 1907 the Register contained the names of persons keeping 3 Cowsheds and 17 Milkshops, together with the names of 32 Purveyors of Milk, of which latter 6 reside outside the Town, but retail milk within.

The Medical Officer of Health and the Food Inspector have continually made visits of inspection to the cowsheds and premises of the milk vendors in the Borough, and by the latter the Bye-Laws regulating these places have, on the whole, been well observed.

SLAUGHTER HOUSES.

The Slaughter Houses in the Borough number 30; 22 to which yearly licences are granted by the Urban Sanitary Authority, and 8 are "Registered" Slaughter Houses. These were in existence before the passing of the Public Health Act, 1875, and are, therefore, exempt from applying for a yearly licence, but must comply with all the sanitary provisions of the Bye-Laws in force.

Mr. Fell, the Food Inspector, reports—

"That he has made 2,102 visits to Slaughter Houses, and examined the carcasses of 845 beasts, 1,317 sheep, and 1,033 pigs."

"He has during the year had destroyed or obtained orders for the destruction of—

651 lbs. of Pork,
320 lbs. of Beef,
90 lbs. of Beef,
85 lbs. of various Offals,
28 lbs. of Fish, and
1 barrel of Oysters (1,000).

and has, on two occasions, cautioned street hawkers as to the quality of the fruit displayed on their barrows."

"He has received no complaints from persons living in the vicinity of the Slaughter Houses as to noise from pig-killing or lowing of cattle while fasting, and all round the premises have been well conducted, and the statutory limewashing of the walls, etc., observed."

"That during the year he has, on three occasions, communicated with the Sanitary Officers in the County, in respect to cows that had been killed outside the Borough, and he is glad to say that on each occasion the carcase was followed up, and destroyed, or ample proof obtained that it was delivered at the kennels."

No legal proceedings were taken in regard to the meat he had condemned and destroyed, as in each case it was voluntarily surrendered by the owners, on the Inspector pointing out that it was unfit for human consumption.

FACTORY AND WORKSHOPS ACT, 1901.

The tables in the Report of the Medical Officer of Health have been compiled from the Registers which are kept as required by Sec. 131.

At the end of the year there were 347 Factories and Workshops and Workplaces on the Register.

BAKEHOUSES.

There are in the Borough 52 Bakehouses, none of which come under the definition of "Underground Bakehouses," as laid down by Sect. 101. They have, on the whole, been maintained in a fairly clean and sanitary condition, but in 18 instances it was found necessary to serve notice as to the periodical limewashing being overdue.

HOME WORK.

The lists of Outworkers received from employers, giving out work to persons at their own homes, have been kept, and prove of great assistance in preventing the spread of infectious disease, as on the receipt of a notification, a glance down the Register, shews at once whether any home work is being done at the infected house.

REPORTS FROM H.M. INSPECTOR OF FACTORIES.

During the year 14 Notices of contravention of the Act, and remediable under the Public Health or other Acts, were received from H.M. Inspector, and the necessary action taken.

The matters referred to by him, were:—

Workshops, limewashing overdue	8
Insufficient sanitary accommodation	1
Defective sanitary convenience	1
Workshop overcrowded	3
Additional means of Fire Escape	1

In addition to the above, 15 notices of occupation of Workshops were received from H.M. Inspector, and same were entered on the Register.

Sale of Food and Drugs Acts, 1875 to 1899.

Summary of the Duties performed and Expenses incurred by me as Inspector in carrying out the Sale of Food and Drugs Acts, for the year ending December 31st, 1907.

Articles.	No. of Samples Procured.	Genuine.	Adulterated.	Cautioned	Proceedings Taken.
New Milk	103	98	5	5	0
Butter	4	4	0	0	0
Cheese.....	2	2	0	0	0
Brandy	3	3	0	0	0
Whisky	3	3	0	0	0
Gin	6	6	0	0	0
Lard	2	2	0	0	0
Total	123	118	5	5	0

AMOUNT OF EXPENSES INCURRED.

Procuring Samples.	Procuring Boxes, Bottles, Printing, Postage, &c.	TOTAL.
£ s. d.	£ s. d.	£ s. d.
2 0	3 18 7	5 18 11

12 Samples of Town Water were also sent to Analyst for Chemical Analysis.

	£ s. d.
Total Expenses incurred as above	5 18 11
Railway Carriage on 12 Water Samples	18 0
Analyst Fees on 135 Samples	111 15 0
Total.....	<u>£118 11 11</u>

The following table gives particulars of the adulterated samples and proceedings taken in connection with same.

Sample No.	Offence.	Remarks.
45	Milk deficient in fat 4·6 p.c.....	Cautioned
47	„ „ 2·3 p.c....	Cautioned
50	„ „ 2·3 p.c.....	Cautioned
105	„ „ 3·0 p.c.....	Cautioned
36	Milk adulterated with 0·001 p.c. formaldehyde	Cautioned

18 Samples procured by agents were certified as genuine.

PRIVATE WELLS.

The number of samples of Water from private wells submitted to the Medical Officer of Health during the past year, for qualitative and bacteriological analysis was 5.

All waters were found to be unfit for dietetic purposes, 4 have been closed, and steps are being taken to obtain this result in the other case.

In conclusion, Mr. Chairman and Gentlemen, I beg to thank you for your continued valuable support in the carrying out of my duties, and for your kind consideration in all matters I have brought before you. I have also to thank you for appointing me as a Delegate, together with the Medical Officer of Health, to attend the Congress of the Public Health, at Douglas, in June last.

To the Town Clerk, the Medical Officer of Health, the Borough Engineer, and other officials, I also tender my thanks, for their valuable co-operation.

I am,

Mr. Chairman and Gentlemen,

Yours faithfully,

ALFRED WALLACE MERRIE,

Sanitary Inspector.

Copies of Bacteriological Analyses of Samples of Town Water

SENT BY MR. A. W. MERRIE FOR THE CORPORATION OF BEDFORD DURING 1907

TO THE

LABORATORIES OF PATHOLOGY AND PUBLIC HEALTH,

62, QUEEN ANNE STREET,

LONDON, W.

Remarks.

Marked No. 1 Service Reservoir, received on January 3rd.

Colonies in standard nutrient gelatine at 18°C., 16 per c.c. Incubated for 100 hours. Colonies in distilled water gelatine at 18°C., 9 per c.c. Incubated 100 hours. Colonies in nutrient agar at 37.5°C., 1.5 per c.c. Incubated for 40 hours. Ratio of "blood heat" to "cool" organisms: 1: 10. B. Coli Communis not found in any quantity of the water up to and inclusive of 60 c.c. Streptococci not found in any quantity of the water up to and inclusive of 60 c.c.

A perfectly satisfactory sample of the Town Supply.

(Signed)

G. L. EASTES.

Marked No. 2 Service Reservoir, received January 28th, 1907.

Colonies in standard nutrient gelatine at 18°C., 12 per c.c. Incubated for 100 hours. Colonies in distilled water gelatine at 18°C., 10 per c.c. Incubated for 100 hours. Colonies in nutrient agar at 37.5°C., 1.5 per c.c. Incubated for 40 hours. Ratio of "blood heat" to "cool" organisms: 1: 8. B. Coli Communis not found in any quantity of the water up to and inclusive of 60 c.c. Streptococci not found in any quantity of the water up to and inclusive of 60 c.c.

Remarks.

A very good sample of the Town Supply.

(Signed)

G. L. EASTES.

Marked No. 3 Service Reservoir, received on February 27th, 1907.

Colonies in standard nutrient gelatine at 18°C., 139 per c.c. Incubated 100 hours. Colonies in distilled water gelatine at 18°C., 36 per c.c. Incubated 100 hours. Colonies in nutrient agar at 37.5°C., 1.5 per c.c. Incubated 40 hours. Ratio of "blood heat" to "cool" organisms: 1: 92. B. Coli Communis not found in any quantity of the water up to and inclusive of 60 c.c. Streptococci not found in any quantity of the water up to and inclusive of 60 c.c.

Remarks.

The total number of cool organisms is higher than usual, but otherwise the sample is bacteriologically good, and quite safe for drinking and domestic purposes.

(Signed)

G. L. EASTES.

Marked No. 4 Service Reservoir, received April 3rd, 1907.

Colonies in standard nutrient gelatine at 18° C., 12 per c.c. Incubated 100 hours. Colonies in distilled water gelatine at 18° C., 21 per c.c. Incubated 100 hours. Colonies in nutrient agar at 37.5° C., 1.5 per c.c. Incubated 40 hours. Ratio of "blood heat" to "cool" organisms: 1:14. *B. Coli Communis* not found in any quantity of the water up to and inclusive of 60 c.c. *Streptococci* not found in any quantity of the water up to and inclusive of 60 c.c.

Remarks.

An excellent sample of Water, perfectly safe for drinking and all domestic purposes.

(Signed)

G. L. EASTES.

Marked No. 5 Service Reservoir, received on April 22nd.

Colonies in standard nutrient gelatine at 18° C., 47 per c.c. Incubated for 100 hours. Colonies in distilled water gelatine at 18° C., 84 per c.c. Incubated for 100 hours. Colonies in nutrient agar at 37.5° C., 5 per c.c. Incubated for 40 hours. Ratio of "blood heat" to "cool" organisms: 1:17. *B. Coli Communis* not found in any quantity of the water up to and inclusive of 60 c.c. *Streptococci* not found in any quantity of the water up to and inclusive of 60 c.c.

Remarks.

This sample is not quite up to the standard which the Bedford Water has recently attained, but it is quite safe for drinking and domestic purposes.

(Signed)

G. L. EASTES.

Marked No. 6 Service Reservoir, received on May 23rd, 1907.

Colonies in standard nutrient gelatine at 18° C., 14 per c.c. Incubated 100 hours. Colonies in distilled water gelatine at 18° C., 30 per c.c. Incubated 100 hours. *B. Coli Communis*: A bacillus was found once in 60 c.c. of the water which had some resemblance to this organism. But on working out its cultural reactions, it was found not to belong even to the "coli" group. *Streptococci* not found in any quantity of the water up to and inclusive of 60 c.c.

Remarks.

An unfortunate accident prevented the enumeration of the "blood heat" organisms. But the sample is perfectly good bacteriologically, and quite safe for drinking and domestic purposes. The quantitative part of the analysis will be repeated without further charge, if another sample of the water is forwarded.

(Signed)

G. L. EASTES.

Marked No. 7 Service Reservoir, received on 17th June, 1907.

Colonies in standard nutrient gelatine at 18° C., 100 per c.c. Incubated 100 hours. Colonies in distilled water gelatine at 18° C., 90 per c.c. Incubated 100 hours. Colonies in nutrient agar at 37.5° C., 1.5 per c.c. Incubated 40 hours. Ratio of "blood heat" to "cool" organisms: 1:66. *B. Coli Communis* present in 60 cubic centimetres of the water. *Streptococci* not found in any quantity of the water up to and inclusive of 60 c.c.

Remarks.

The water is perfectly safe for drinking and domestic purposes.

(Signed)

G. L. EASTES.

Marked No. 8 Service Reservoir, received on July 23rd, 1907.

Colonies in standard nutrient gelatine at 18° C., 89 per c.c. Incubated 100 hours. Colonies in distilled water gelatine at 18° C., 167 per c.c. Incubated 100 hours. Colonies in nutrient agar at 37.5° C., 3 per c.c. Incubated 40 hours. Ratio of "blood heat" to "cool" organisms: 1:56. *B. Coli Communis* not found in any quantity of the water up to and inclusive of 60 c.c. *Streptococci* not found in any quantity of the water up to and inclusive of 60 c.c.

Remarks.

The water is perfectly safe for drinking and domestic purposes.

(Signed)

G. L. EASTES.

Marked No. 9 Service Reservoir, received on August 16th.

Colonies in standard gelatine at 18° C., 148 per c.c. Incubated 100 hours.
Colonies in distilled water gelatine at 18° C., 81 per c.c. Incubated 100 hours.
Colonies in agar at 37.5° C., 1.5 per c.c. Incubated 40 hours. Ratio of "blood heat" to "cool" organisms: 1:100. B. Coli Communis not found in any quantity of the water up to and inclusive of 60 c.c. Streptococci present once in every 20 c.c. of the water.

Remarks.

The presence of Streptococci is a disturbing element, but on other grounds I consider the water safe for drinking and domestic purposes.

(Signed)

G. L. EASTES.

Marked No. 10 Service Reservoir, received on September 26th, 1907.

Colonies in standard nutrient gelatine at 18° C., 89 per c.c. Incubated for 100 hours. Colonies in distilled water gelatine at 18° C., 43 per c.c. Incubated for 100 hours. Colonies in nutrient agar at 37.5° C., 0 per c.c. Incubated for 40 hours. Ratio of "blood heat" to "cool" organisms xxxx:0:x. B. Coli Communis not found in any quantity of the water up to and inclusive of 60 c.c. Streptococci not found in any quantity of the water up to and inclusive of 60 c.c.

Remarks.

A good sample of the town supply, and quite safe for drinking and domestic purposes.

(Signed)

G. L. EASTES.

Marked No. 11, taken from the Service Reservoir, October 24th, 1907.

Colonies in standard gelatine at 18° C., 17 per c.c. Incubated 100 hours. Colonies in distilled water gelatine at 18° C., 15 per c.c. Incubated 100 hours. Colonies in nutrient agar at 37.5° C., 1 per c.c. Incubated 40 hours. Ratio of "blood heat" to "cool" organisms: 1:17. B. Coli Communis not found in any quantity of the water up to and inclusive of 60 c.c. Streptococci not found in any quantity of the water up to and inclusive of 60 c.c.

Remarks.

A very good sample of water, perfectly safe for drinking and domestic purposes.

(Signed)

G. L. EASTES.

Marked No. 12 Service Reservoir, received Dec. 5th, 1907.

Colonies in standard nutrient gelatine at 18° C., 63 per c.c. Incubated for 100 hours. Colonies in distilled water gelatine at 18° C., 72 per c.c. Incubated for 100 hours. Colonies in nutrient agar at 37.5° C., 11 per c.c. Incubated for 40 hours. Ratio of "blood heat" to "cool" organisms: 1:6.5. B. Coli Communis not found in any quantity of the water up to and inclusive of 60 c.c. Streptococci not found in any quantity of the water up to and inclusive of 60 c.c.

Remarks.

The number of bacteria present per cubic centimeter is higher than Town supply usually shows, but this is probably due to heavy rainfall. The water is perfectly safe for drinking and domestic purposes.

(Signed)

G. L. EASTES.

Copies of Chemical Analyses of Samples of Town Water, 1907.

CHEMICAL LABORATORY,

TOWN HALL,

ROSEBERY AVENUE, E.C.

Report upon Samples of Water forwarded for the Mayor and Corporation of the Borough of Bedford, by Mr. A. W. Merrie, Town Hall, Bedford, during 1905.

No 1, taken from Service Reservoir, 3rd January, 1907.

Analysis (expressed in parts per 100,000).

Chlorine	2.7	parts per 100,000.
Nitrogen as Nitrates	0.057	"
Saline Ammonia	0.0006	"
Albuminoid Ammonia	0.009	"
Oxygen absorbed in 15 minutes	0.021	"
Oxygen absorbed in 1 hour	0.243	"
Hardness—total	33.0	"
,, permanent	10.8	"
,, temporary	22.2	"
Alkalinity (as Calcium Carbonate)	23.5	"
Total Solid Matter	51.0	"
Calcium Sulphate	10.2	"
Sodium Sulphate	5.0	"

The sample was clear and had no smell.

A microscopic examination revealed the presence of a few vegetable fragments.

Opinion.

The deviation noted in the last sample has disappeared, and the water is again at about its normal condition.

J. KEAR COLWELL.

No. 2 taken from Service Reservoir on January 28th, 1907.

Analysis (expressed in parts per 100,000).

Chlorine	2.8	parts per 100,000.
Nitrogen as Nitrates	0.040	"
Saline Ammonia	0.0014	"
Albuminoid Ammonia	0.0060	"
Oxygen absorbed in 15 minutes	0.043	"
Oxygen absorbed in 1 hour	0.206	"
Alkalinity (as Calcium Carbonate)	24.5	"
Hardness—total	35.5	"
,, permanent	10.5	"
,, temporary	25.0	"
Total Solid Matter	53.0	"
Calcium Sulphate	9.7	"
Sodium Sulphate	6.0	"

The sample was clear and had no smell. A microscopic examination revealed the presence of one or two vegetable fragments.

Opinion.

The above analysis indicates that the water is in very good condition.

J. KEAR COLWELL.

No. 3 Town Water, taken from Service Reservoir, 27th February, 1907.

Analysis (expressed in parts per 100,000).

Chlorine	2.8	parts per 100,000.
Nitrogen as Nitrates	0.042	,,
Saline Ammonia	0.0004	,,
Albuminoid Ammonia	0.0118	,,
Oxygen absorbed in 15 minutes	0.011	,,
Oxygen absorbed in 1 hour	0.181	,,
Alkalinity (as Calcium Carbonate)	23.5	,,
Hardness—total	35.0	,,
,, permanent	11.5	,,
,, temporary	23.5	,,
Total Solid Matter	58.0	,,
Calcium Sulphate	9.0	,,
Sodium Sulphate	7.8	,,

The sample was clear and had no smell. A microscopic examination revealed the presence of more fragments of vegetable debris than are usually found in Bedford water.

Opinion.

The good condition of the water has not been maintained. Although to the unaided eye it appears clear there is considerably more suspended matter than usual.

J. KEAR COLWELL.

No. 4 Water taken from Service Reservoir, 2nd April, 1907.

Analysis (expressed in parts per 100,000).

Chlorine	2.8	parts per 100,000.
Nitrogen as Nitrates	0.049	,,
Saline Ammonia	0.0006	,,
Albuminoid Ammonia	0.0140	,,
Oxygen absorbed in 15 minutes	0.027	,,
Oxygen absorbed in 1 hour	0.179	,,
Alkalinity (as Calcium Carbonate)	24.0	,,
Hardness—total	35.0	,,
,, permanent	11.0	,,
,, temporary	24.0	,,
Total Solid Matter	53.8	,,
Calcium Sulphate	8.1	,,
Sodium Sulphate	7.3	,,

The sample was clear and had no smell. A microscopic examination revealed the presence of a few fragments of vegetable and mineral matter.

Opinion.

The quantity of Ammonia is higher, but there is not so much suspended matter as in the last sample.

J. KEAR COLWELL.

No. 5 Water taken from Service Reservoir, April 21st, 1907.

Analysis (expressed in parts per 100,000).

Chlorine	2.8	parts per 100,000.
Nitrogen as Nitrates	0.037	,,
Saline Ammonia	0.0008	,,
Albuminoid Ammonia	0.0126	,,
Oxygen absorbed in 15 minutes	0.039	,,
Oxygen absorbed in 1 hour	0.215	,,

Alkalinity (as Calcium Carbonate)	24.0	„
Hardness—total	34.0	„
„ permanent	11.0	„
„ temporary	23.0	„
Total Solid Matter	52.0	„
Calcium Sulphate	6.3	„
Sodium Sulphate	7.4	„

The sample was clear and had no smell. A microscopic examination revealed the presence of some fragments of vegetable matter.

Opinion.

There is a slight decrease in the Ammonia. The increased quantity of Oxygen absorbed is probably due to the showers which fell for some time previous to the collection of the sample.

J. KEAR COLWELL.

No. 6, taken from Service Reservoir, on May 23rd, 1907.

Analysis (expressed in parts per 100,000).

Chlorine	2.6	parts per 100,000.
Nitrogen as Nitrates	0.038	„
Saline Ammonia	0.0002	„
Albuminoid Ammonia	0.0064	„
Oxygen absorbed in 15 minutes	0.070	„
Oxygen absorbed in 1 hour	0.221	„
Alkalinity (as Calcium Carbonate)	23.0	„
Hardness—total	34.0	„
„ permanent	11.5	„
„ temporary	22.5	„
Total Solid Matter	53.0	„
Calcium Sulphate	10.7	„
Sodium Sulphate	7.8	„

The sample was clear and had no smell. A microscopic examination revealed the presence of one or two vegetable and mineral fragments.

Opinion.

The above analysis indicates that the water is at the present time in good condition.

J. KEAR COLWELL.

No. 7. Service Reservoir, taken June 17th, 1907.

Analysis (expressed in parts per 100,000).

Chlorine	2.7	parts per 100,000.
Nitrogen as Nitrates	0.028	„
Saline Ammonia	0.0010	„
Albuminoid Ammonia	0.0156	„
Oxygen absorbed in 15 minutes	0.052	„
Oxygen absorbed in 1 hour	0.148	„
Alkalinity (as Calcium Carbonate)	23.5	„
Hardness—total	33.0	„
„ permanent	10.0	„
„ temporary	23.0	„
Total Solid Matter	53.0	„
Calcium Sulphate	8.1	„
Sodium Sulphate	6.6	„

The sample was very slightly turbid, but had no smell.

A microscopic examination revealed the presence of some vegetable debris.

Opinion.

The most notable feature in the above analysis is the quantity of albuminoid ammonia, which is twice the amount found in the previous sample. It indicates that the water is not in its normal condition.

J. KEAR COLWELL.

No. 8 Town Water from Service Reservoir, July 22nd, 1907.

Analysis (expressed in parts per 100,000).

Chlorine	2.7	parts per 100,000.
Nitrogen as Nitrates	0.036	,,
Saline Ammonia	0.0014	,,
Albuminoid Ammonia	0.0092	,,
Oxygen absorbed in 15 minutes	0.017	,,
Oxygen absorbed in 1 hour	0.207	,,
Alkalinity (as Calcium Carbonate)	23.0	,,
Hardness—total	31.5	,,
,, permanent	9.5	,,
,, temporary	22.0	,,
Total solid matter	48.8	,,
Calcium Sulphate	9.3	,,
Sodium Sulphate	6.6	,,

The sample was clear and had no smell.

A microscopic examination revealed the presence of a few fragments of mineral matter.

Opinion.

I am glad to report that the Water has returned to its normal condition.

J. KEAR COLWELL.

No. 9, Water from Service Reservoir, August 16th, 1907.

Analysis (expressed in parts per 100,000).

Chlorine	2.9	parts per 100,000.
Nitrogen as Nitrates	0.030	,,
Saline Ammonia	0.0020	,,
Albuminoid Ammonia	0.0056	,,
Oxygen absorbed in 15 minutes	0.016	,,
Oxygen absorbed in 1 hour	0.205	,,
Alkalinity (as Calcium Carbonate)	24.5	,,
Hardness—total	32.5	,,
,, permanent	9.8	,,
,, temporary	22.7	,,
Total Solid Matter	52.6	,,
Calcium Sulphate	8.1	,,
Sodium Sulphate	7.1	,,

The sample was clear and had no smell.

A microscopic examination revealed the presence of a few fragments of mineral and vegetable matter.

Opinion.

The water at present is evidently in good condition.

J. KEAR COLWELL.

No. 10 Town Water taken from Service Reservoir, September 26th, 1907.

Analysis (expressed in parts per 100,000).

Chlorine	3.0	parts per 100,000.
Nitrogen as Nitrates	0.022	,,
Saline Ammonia	0.0018	,,
Albuminoid Ammonia	0.0086	,,
Oxygen absorbed in 15 minutes	0.020	,,
Oxygen absorbed in 1 hour	0.204	,,
Alkalinity (as Calcium Carbonate)	24.5	,,
Hardness—total	33.5	,,
,, permanent	10.0	,,
,, temporary	23.5	,,
Total Solid Matter	53.0	,,
Calcium Sulphate	8.5	,,
Sodium Sulphate	6.3	,,

The sample was clear and had no smell.

A microscopic examination revealed the presence of some vegetable debris and one or two moving organisms (*Infusoria*).

Opinion.

Except for a slight increase in the quantity of Albuminoid Ammonia the water is in much the same condition as last month. The presence of one or two specimens of infusorial life may have been accidental.

J. KEAR COLWELL.

No. 11, Town Water from Service Reservoir, Oct. 23rd, 1907.

Analysis (expressed in parts per 100,000).

Chlorine	3.5	parts per 100,000.
Nitrogen as Nitrates	0.018	,,
Saline Ammonia	0.0024	,,
Albuminoid Ammonia	0.0110	,,
Oxygen absorbed in 15 minutes	0.007	,,
Oxygen absorbed in 1 hour	0.249	,,
Alkalinity (as Calcium Carbonate)	25.0	,,
Hardness—total	30.0	,,
,, permanent	7.0	,,
,, temporary	23.0	,,
Total Solid Matter	51.5	,,
Calcium Sulphate	5.2	,,
Sodium Sulphate	8.7	,,

The sample was clear and had no smell.

A microscopic examination revealed the presence of some vegetable debris and mineral water.

Opinion.

The larger quantity of Chlorine and Ammonia indicate that some change has taken place in the water; it is certainly not in such good condition as usual.

J. KEAR COLWELL.

No. 12, taken from Service Reservoir, Dec. 5th, 1907.

Analysis (expressed in parts per 100,000).

Chlorine	2.6	parts per 100,000.
Nitrogen as Nitrates	0.018	,,
Saline Ammonia	0.0004	,,
Albuminoid Ammonia	0.0110	,,
Oxygen absorbed in 15 minutes	0.026	,,
Oxygen absorbed in 1 hour	0.252	,,
Alkalinity (as Calcium Carbonate)	22.5	,,
Hardness—total	30.0	,,
,, permanent	10.0	,,
,, temporary	20.0	,,
Total Solid Matter	49.5	,,
Calcium Sulphate	9.4	,,
Sodium Sulphate	6.8	,,

The sample was clear and had no smell.

A microscopic examination revealed the presence of some vegetable debris.

Opinion.

There is a considerable decrease in the Chlorine and Saline Ammonia. The organic constituents are practically the same as in the last sample.

J. KEAR COLWELL.



Borough of Bedford.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

WITH

TABLES OF MORTALITY.

For the Year 1907.

To the Bedford Urban Sanitary Authority.

GENTLEMEN,—

I have the honour to submit to you my Annual Report for the year 1907.

ESTIMATED POPULATION.—The estimated population of Bedford at the end of June, 1907, was 40,486; the estimated number of inhabited houses being 8,569. It would be possible to estimate the population much more accurately if the census was taken at five-yearly, instead of ten-yearly, intervals. In growing towns like Bedford this is a matter of some practical importance.

BIRTH RATE.—During the year 1907 there were 718 births, a number lower by 11 than the average for the preceding ten years. The birth rate per 1,000 of population was 17.75, as against the decennial average 18.87.

DEATH RATE.—The total number of deaths registered in the borough during the year was 513. This number, when corrected for the deaths of “Non-Residents” occurring in public institutions within, and for those of “Residents” in similar institutions outside the borough, gives a “nett” total of 477. The corrected death rate per 1,000 of population was 11.78, which differs but slightly from the average of the last ten years, viz., 11.6. The average for the years 1860—1869 was 19.5; for 1870—1879, the same, viz., 19.5; for 1880—1889, 15.43; for 1890—1899 it was 12.73. Had the rate for the past year been equal to the average rate of the “sixties,” there would have been 790 deaths instead of 477; a difference of 313.

INFANT MORTALITY.—There were 84 deaths of infants under 1 year of age, giving a death rate of 116.9 per 1,000 births registered. Only 5 of these deaths were due to Diphtheria, as contrasted with 33 from the same cause last year. The difference was no doubt due to the peculiar character of the weather last summer. Twenty-one deaths of infants were certified as due to premature birth.

MORTALITY OF CHILDREN.—There were 53 deaths of children between 1 and 5 years of age; these, added to those of infants under 1 year old, make a total death-roll of 137 deaths before 5 years of age, constituting 28.7 per cent. of the total deaths of the year. Appended to this report is a map shewing the distribution of all deaths under 5 years of age during 1907. The close dependence of infantile mortality upon social conditions is strikingly displayed. Whooping Cough was unusually prevalent in the earlier part of the year, and one-third of the deaths of children under five years of age were due to this cause.

GENERAL MORTALITY.—Of the total number of deaths, 162 occurred at or over the age of 65. Between the ages of 5 and 25, that is, the period of childhood and early adult life, there were 29 deaths, of which 10 (a third) were certified as due to Tubercular disease; of these 10 deaths 5 were due to Tuberculosis of the Lungs (“Consumption”).

Under the heading of "All Other Causes," 168 deaths will be noticed entered in Table IV. Of these 51 were certified as due to Senile Decay. Of this band of veterans one only (aged 69) had not reached the limit of three score years and ten; one attained the great age of 97, being one of four who exceeded 90 years; 25 were between 80 and 89, and 21 between 70 and 79. The average age of the 19 males was 80.7 years; of the 32 females, 81.8; the average for both sexes was 81.4.

Of the remaining deaths included in this section, 26 were due to Apoplexy and Cerebral Hæmorrhage, occurring, as might be expected, chiefly in elderly and aged persons; 8 deaths occurred from diseases of the Nervous system; 3 from Epilepsy; 5 from various forms of Intestinal obstruction; 4 from diseases of the gall bladder; 14 from diseases of the urinary system; 9 from Diabetes at ages varying from 13 to 84.

INFECTIOUS DISEASES.—The condition of the town in regard to Infectious Diseases has been much more satisfactory than in the two preceding years, the total being for 1907 only 123, as against 332 in 1906. There were 72 cases of Scarlet Fever with 2 deaths, giving a "case-mortality" of 26.4 per 1,000. The disease, as in the previous year, showed no relation to the milk supply, as is evidenced by the table appended.

Of Diphtheria there were 39 cases, with 3 deaths, giving a "case-mortality" of 76.9 per 1,000. Last year the "case-mortality" was 159.5 per 1,000.

ENTERIC FEVER.—Four cases of Enteric Fever occurred during the year, all of which ended fatally. One death, however, was that of a "Non-Resident," and does not affect the corrected death rate. In my report for last year, I referred to the case of a boy who contracted the disease by eating whelks, and I stated that his mother had also contracted it in nursing him. This woman ultimately died, but, unfortunately, two other persons, the one a nurse in attendance on her, and the other a patient in the next bed, also became infected and died. These lamentable cases illustrate only too forcibly the fact that the disease is contagious, and not always acquired through the medium of drinking water. The fourth case occurred independently, and though careful inquiry failed to detect the source of infection, there was strong reason to suspect that the disease was contracted during a visit in a neighbouring county at a time when some cases were known to have occurred there.

FACTORIES AND WORKSHOPS.—The details of inspection are appended to this report. There have been no serious offences against the Act, and no circumstances of special importance have arisen during the year. In one large establishment fresh and adequate precautions against the risk of loss of life from fire have been taken.

FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES AND HOMEWORK.

1.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES

PREMISES.	NUMBER OF		
	Inspections.	Written Notices.	Prosecutions.
Factories (Including Factory Laundries).	48	2	—
Workshops (Including Workshop Laundries.)	234	30	—
Workplaces (Other than Outworkers' premises included in Part 3 of this Report.	39	11	—
Total	321	43	—

2.—DEFECTS FOUND.

PARTICULARS.	NUMBER OF DEFECTS			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts :</i>				
Want of cleanliness	29	29		
Want of ventilation	1	1		
Overcrowding	3	3		
Want of drainage of floors	—	—		
Other nuisances	—	—		
Sanitary accommodation:—				
Insufficient	5	5		
Unsuitable or defective .	5	5		
Not separate for sexes ..	—	—		
<i>Offences under the Factory and Workshop Act:—</i>				
Illegal occupation of underground bakehouse (s. 101)	—	—		
Breach of special sanitary requirements for bakehouses (ss. 97 to 100) ..	—	—		
Other offences (Excluding offences relating to outwork which are included in Part 3 of this report.)	—	—		
Total	43	43	0	0

3.—HOME WORK.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107.										OUTWORK IN UN- WHOLESOME PRE- MISES, SECTION 108.			OUTWORK IN IN- FECTED PREMISES, SECTIONS 109—110.		
	Lists received from Employers.						Prosecutions.				Instances.	Prosecutions.	Orders made (S. 110).	Instances.		
	Twice in the year.		Once in the year.				Failing to keep or permit inspection of lists.	Failing to send Lists.	Numbers of Addresses of Outworkers rec'd from other Councils.	Numbers of Addresses of Outworkers forw'd to other Councils.						
	Lists.	Con- tractors.	Outworkers.	Workmen.	Lists.	Con- tractors.									Workmen.	
Wearing Apparel— (1) making, &c. (2) cleaning and washing Lace, lace curtains & nets Artificial flowers Nets, other than wire nets Tents Sacks Furniture and Upholstery Fur pulling Feather sorting Umbrellas, &c. Carding, &c. of buttons, &c. Paper Bags and Boxes Basket making Brush making Racquet and tennis balls Stuffed Toys File making Electro-Plate Cables and Chains Anchors and Grapnels . . Cart Gear Locks, Latches and Keys Pea picking	18 .<															

4.—REGISTERED WORKSHOPS.				5.—OTHER MATTERS.			
Workshops on the Register (s. 131) at the end of the year.				Class.		Number.	
Factories	Matters notified to H.M. Inspector of Factories:— Failure to affix Abstract of the Factory and Workshop Act (s. 133)	..	..
Workshop Bakehouse
Other Workshops	Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5)	Notified by H.M. Inspector	14
Work Places
Total number of workshops on Register				..	Other	..	..
				..	Underground Bakehouses (s. 101):— Certificates granted during the year	..	..
				..	In use at the end of the year	..	..
				..	Total	..	28

Names of Milkmen (represented by numbers) supplying milk to houses where cases of Infectious Diseases occurred in 1907.

NAMES.	SCARLET.	DIPHThERIA.	TOTAL.
1	5	2	7
2	0	1	1
3	3	0	3
4	1	2	3
5	3	3	6
6	0	2	2
7	6 (3 in one family)	1	7
8	3	0	3
9	6 (5 in two families)	3	9
10	5	0	5
11	2	1	3
12	2	1	3
13	1	2	3
14	4	0	4
15	2	0	2
16	3	0	3
17	0	2	2
18	8 (5 in one family)	1	9
19	2	2	4
20	1	0	1
21	1	0	1
22	3	2	5
23	0	1	1
24	1	1	2
25	1	3	4
26	1	4 (2 in 1 family)	5
27	2	0	2
28	1	0	1
29	1	0	1
30	0	1	1
31	2	1	3
32	1	0	1
33	1	3	4
33 Milkmen	111 cases		111

DAIRIES AND COWSHEDS.—There are now only three cowsheds in the borough, one having been recently transferred to ground outside the boundary. I have paid frequent visits to these establishments, and have urged the adoption of improvements. I regret that the owners do not realize sufficiently that their own interests may be seriously hazarded by their reluctance to improve the sanitary conditions of their business.

The retail milk-shops are regularly visited by the Food Inspector, and at intervals by myself. The dealers appear anxious to conform with the bye-laws, and distinct improvement in the methods of conducting their business has taken place in the last twelve months.

SLAUGHTER HOUSES.—These have been frequently inspected, and no serious complaints have been received. It is to be hoped that legislation will some day not merely sanction, but enforce, the use of public abattoirs.

INSANITARY AREAS.—Though, on the whole, Bedford is remarkably free from slum districts, yet there are certain small areas which should, if and when occasion occurs, be improved. I am glad to say that all the cottages in Maulden's Yard, the most insanitary area in the town, will shortly be closed. In certain courts, of which there are not many, the houses have no back premises, and only scanty through ventilation; there is, however, plenty of space in front, and this, in every case, will be much improved when the paving which is being carried out has been completed.

WATER SUPPLY.—The quality of the water supplied throughout the year has been good, as evidenced by the reports of Messrs. Keir Colville and Eastes, and also by the results of the weekly bacteriological examinations, made in the Borough Laboratory, of specimens taken from the Rising Main; the battery of Pressure Filters, the two Circular Filters, the old Filter Beds, and from the Service Reservoir. In addition a systematic examination of the chemical character of the water from the river, from the old Main Heading, and from the New Well, has been carried out for some months past. The results have all been communicated to Major Tulloch, who is preparing a Report on the Water Supply.

ISOLATION HOSPITALS.—The Matron, Miss Cubitt, having resigned, Miss Bartlett was elected by the Public Health Committee as her successor, and entered on her duties on February 8th.

It would be unbecoming to close this Report without a reference to the death of my respected colleague, Dr. Charles Prior, Consulting Medical Officer of Health to this Borough. He had discharged with conspicuous ability the duties of Medical Officer of Health from the first institution of that office down till the year 1905, and had witnessed and helped to guide the remarkable progress of Bedford in the last thirty years.

I have to thank my colleagues, Mr. Merrie and Mr. Fell, for their invaluable and zealous assistance, and wish also to make mention of the excellent work of my Laboratory Assistant, F. Haynes.

I remain, Gentlemen,

Your obedient Servant,

F. B. WILLMER PHILLIPS, M.D., D.P.H., B.Sc.

February 11th, 1908.

TABLE I.

Vital Statistics of Whole District during 1907 and previous Years.

Name of District: Bedford Urban Sanitary Authority.

YEAR.	Popula- tion estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.				Total Deaths in Public Institu- tions in the District.	Deaths of Non- residents register'd in Public Institu- tions in the District.	Deaths of residents register'd in Public Institu- tions beyond the District.	Nett Deaths at all Ages belonging to the District.	
				Under 1 year of age		At all ages.					Number.	Rate.
		Number	Rate.	Number.	Rate per 1000 Births register'd	Number.	Rate.					
1897	33,550	744	22.2	95	128	466	13.8	93	45	12	433	12.96
1898	34,615	691	19.2	97	140	459	13.20	78	43	6	422	12.23
1899	35,440	753	21.0	111	147	441	12.44	84	45	6	405	11.47
1900	36,715	749	20.4	97	129	451	12.28	78	26	0	424	11.27
1901	35,144	767	21.7	93	121	483	13.7	103	50	3	436	12.4
1902	36,526	735	20.12	79	108	401	10.95	86	41	20	380	10.40
1903	37,100	711	19.2	83	117	434	11.69	101	50	14	398	10.72
1904	38,152	732	18.9	90	124	512	13.4	105	54	15	473	12.4
1905	38,900	668	17.2	62	91.3	447	11.5	112	40	9	416	10.7
1906	39,580	744	18.79	87	116.9	488	12.3	115	42	13	459	11.59
Averages for years 1897-1906	36,572	729	18.87	89	122.2	458	12.5	95.5	43.6	8.8	424.6	11.6
1907	40,486	718	17.73	84	116.9	513	12.6	106	42	6	477	11.78

Area of District in acres (exclusive of area covered by water) 2,200 acres.

Total population of all ages ..	35,144	} At Census of 1901.
Number of inhabited houses ..	7,341	
Average number of persons per house	4.79	

TABLE III.—CASES OF INFECTIOUS DISEASE
NOTIFIED DURING THE YEAR, 1907.

NOTIFIABLE DISEASE.	At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65	65 and up- wards.	Total cases re- moved to Hospital.
Diphtheria .. (including Mem- branaceous croup)	39	..	3	23	9	4	..	28
Erysipelas ..	8	..	..	..	..	7	1	..
Scarlet fever..	72	..	21	43	5	3	..	50
Enteric fever	4	..	..	..	1	3	..	..
Totals	123	..	24	66	15	17	1	78

Isolation Hospital, Bedford Urban District.

TABLE IV.

Causes of, and Ages at, Death during Year 1907.

CAUSES OF DEATH.	DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING IN OR BEYOND THE DISTRICT.							Total Deaths whether of "Residents" or "non- Residents" in Public Institutions in the District.
	All ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and up- wards.	
Small-pox .. ..	..	..	..	..	..	..	..	..
Measles	10	3	6	1	..	..	..	0
Scarlet Fever	2	..	2	..	..	..	..	2
Whooping-cough ..	25	8	17	..	..	..	..	1
Diphtheria and membra- nous croup	3	..	3	..	..	..	..	3
Croup	2	..	1	1	..	..	..	0
Fever } Typhus .. ..	..	..	..	..	..	..	..	..
} Enteric	3	..	..	..	..	3	..	4
} Other continued	..	..	..	..	..	..	..	..
Epidemic influenza ..	6	..	..	..	..	4	2	..
Cholera .. ..	..	..	..	..	..	..	..	..
Plague .. ..	..	..	..	..	..	..	..	..
Diarrhœa	8	5	1	..	..	1	1	..
Enteritis	5	2	1	..	..	1	1	..
Puerperal Fever ..	..	..	..	..	..	..	..	..
Erysipelas .. ..	..	..	..	..	..	..	..	1
Other septic diseases ..	1	..	..	..	1	..	..	2
Phthisis (Pulmonary Tuberculosis.)	37	1	..	2	3	28	3	9
Other tubercular diseases	8	..	2	2	3	1	..	4
Cancer, malignant disease	32	..	..	..	..	20	12	9
Bronchitis	44	10	6	..	..	7	21	7
Pneumonia	25	5	8	..	..	10	2	4
Pleurisy	2	..	..	..	2	..	..	..
Other diseases of respira- tory organs	2	1	..	..	..	1	..	1
Alcoholism } ..	7	..	..	..	1	6	..	..
Cirrhosis of liver } ..	3	3	..	..	..	..	..	..
Venereal diseases ..	21	21	..	..	..	..	..	..
Premature births ..	21	21	..	..	..	..	..	..
Diseases and accidents of parturition	5	..	..	..	..	5	..	1
Heart diseases	49	..	..	..	2	22	25	8
Accidents	7	..	..	1	2	3	1	11
Suicides	2	..	..	..	..	2	..	..
All other causes ..	168	25	6	6	2	35	94	37
All causes	477	84	53	13	16	149	162	106

TABLE V.

Borough of Bedford.

Infantile mortality during the Year 1907.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.		Under 1 week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
All Causes.	Certified	19	6	1	4	30	14	4	4	5	6	6	4	2	2	3	4	84
	Uncertified																	
Common Infectious Diseases	Small-pox																	
	Chicken-pox																	
	Measles											1	1		1			3
	Scarlet Fever																	
	Diphtheria (including Membranous Croup)																	
	Whooping Cough								1	1		2	1	2			1	8
Diarrhœal Diseases	Diarrhœa, all forms								1	1	1		1				1	5
	Enteritis, Muco-enteritis																	
	Gastro-enteritis																	
	Gastritis, Gastro-intestinal Catarrh						1			1								2
Wasting Diseases,	Premature Birth	14	3			17	4											21
	Congenital Defects	2				2												2
	Injury at Birth																	
	Want of breast-milk, Starvation																	
	Atrophy, Debility, Marasmus	1	1	1	2	5	2	3	1							1		12
Tuber- culous Diseases.	Tuberculous Meningitis																	
	Tuberculous Peritonitis																	
	Tabes Mesenterica																	
	Other Tuberculous Diseases						1											1
Other Causes.	Erysipelas																	
	Syphilis						2			1								3
	Rickets																	
	Meningitis						1											1
	(not Tuberculosis)																	
	Convulsions	2	1			3	1	1		1		1			1	1		9
	Bronchitis		1		2	3			1		3		1			1	2	11
	Laryngitis																	
	Pneumonia						1				1	2						4
	Suffocation, overlying																	
	Other causes						1				1							2

District (or sub-division) of Bedford Urban.

Population (estimated to middle of 1907), 40,486.

Deaths from all Causes at all Ages, 477.





Borough of Bedford.

REPORT

OF THE

SANITARY INSPECTOR

For the Year 1907.

